Packed Spool Directional Control Valves
- Directional Valve for a range of applications
- Up to 46 GPM (32 GPM nominal)
- 3000 PSI (207 bar) and 6000 PSI (414 bar)

Proportional Pressure Control System
Controlled Pressure Ranges:
- 390 PSI (27 bar) to 1500 PSI (103 bar)
- 480 PSI (33 bar) to 3000 PSI (207 bar)
- 580 PSI (40 bar) to 6000 PSI (414 bar)
Flow Rate: Up to 1000 GPM (3785 LPM)

Modular ISO-Lock
- Isolates manifold mounted directional control valves
- Reduces maintenance time - replace Directional Valves without depressurizing and draining hydraulic system.
- Single lever operation to close all four ports (P, T, A, B). Cylinders can remain under the external load without having to be blocked.
- Lockable per OSHA safety standard
- NFPA “DO”/CETOP and special mounting patterns available

Descaling Valves & Pump Unloading Systems
- Capacities:
  - 3000 PSI (207 bar)
  - 6000 PSI (414 bar)
  - 6000 GPM (22710 LPM)
- Connection Sizes: 1-1/4” to 10”

Poppet Type Directional Control Valves
- Capacities to 1600 GPM (6057 LPM)
- 3000 PSI (207 bar), 4500 PSI (310 bar) and 6000 PSI (414 bar) models are available
- Built-in flow control
- Manifold mounted, NPT, socket weld or flanged

Accumulator Systems
- Designed to your specifications
- Mill Systems
- Presses
- Controls
- Level Pressure Pump Sequencing Ballast Charging

Descaling Valves - Spindle – Brochure 2218
DIN – Brochure 2219
Pump Unloading Systems – Brochure 2213

Brochures 104, 2213, 2218, 2219

WATER HYDRAULIC COMPONENTS
Packed Spool Pilot Valve

- Sizes Manifold Mount – DO5
- Capacities to 20 GPM (75 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Zero Leakage
- Stainless Steel Components
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Multiple Function Configurations
- Air/Electrical or Manually Operated

Valve Stands, Manifolds and Systems

- Customized control valve packages including valve stand and forged steel manifold with SAE flange connections, wiring and common air line to all pilots
- Designed to meet customer circuit requirements
- Optional modular isolation valves for reduced maintenance time
- Integrate Elwood valves and customized electronic controls with non-Elwood components for single source convenience

Directional Control Valves

- Sizes DIN 16 through DIN80 Manifold Mount, or SAE Flange Connections
  - Available in 2-, 3- or 4-Way, with multiple function configurations
- Capacities to 6000 GPM (23000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Serviceability
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

Check Valves

- Sizes 2” through 10” Manifold Mount, ASTM or SAE Flange Connections
- Capacities to 8000 GPM (30000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Soft or Hard Seat Plungers
- Multiple Cracking Pressure Configurations
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow
ISO-LOCK Valve

- Sizes Industry Standard Patterns NFPA/ANSI D03, D05, D08, C08, C09, RP10 & P06
- Elwood Patterns
- Capacities to 350 GPM (1300 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Provides positive isolation of ports
- Fast & easy installation
- Allows for system diagnostics
- OSHA compliant Lockout/Tagout System
- Designed to operate with low viscosity fluids, raw water & OIL

Descale Valves – DIN or Spindle Style

- Sizes 2” through 10”
- Capacities to 6000 GPM (23000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

Accumulator Control System

- Microprocessor based, computer compatible
- Designed for efficient control of air or gas ballasted accumulators, including:
  - Level, pressure and ballast control
  - Pump Sequencing
  - Level and pump status indicators
  - Pressure indicators
  - Computer port
  - Chart recorder output
  - Pump-enable switches
  - Shut-off control
  - Stop valve control

Descale Valves

- Sizes 2” through 10”
- Capacities to 6000 GPM (23000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

Accumulator Shut-Off Valve

- Sizes 2” through 10”
- Capacities to 8000 GPM (30000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability and long-lasting performance
- Balanced Poppet Design
- Stainless Steel Spring-Assisted Design
  - Positive Sealing at low pressure filling operations
- Adjustable Pneumatic Flow
- One High-Pressure Static Seal
- Fluid Flow Technology
  - Shield Seat Design
  - Inverse Fluid Flow
Descaling System Components

Stop Valves
- Sizes 2" through 10"
- Capacities to 3400 GPM (13000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Serviceability
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Manual or Hydraulically Operated Pilot
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - Fluid Flow Control Ports
  - Shield Seat Design
  - Inverse Fluid Flow

Pump Unloading Systems
- Sizes Manifold mounted DIN 25 through 100 DIN 80 and 100 Modular Inline System
- Capacities to 2350 GPM (9000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Serviceability
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Removable Stainless Steel Orifice Assembly
- Fluid Flow Technology
  - Fluid Flow Control Ports
  - Shield Seat Design
  - Inverse Fluid Flow

Pressure Control Valves – Relief or Reducer
- Sizes Manifold Mount, or SAE Flange Connections
- Capacities to 1000 GPM (3800 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

Proportional Pressure Control Valves – Relief, Reducer or Dual
- Sizes Manifold Mount, or SAE Flange Connections
- Capacities to 300 GPM (1140 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow
### Descaling System Components

#### Hydraulic System Components

### Stop Valves

- Sizes 2" through 10"
- Capacities to 3400 GPM (13000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Serviceability
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Manual or Hydraulically Operated Pilot
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - Fluid Flow Control Ports
  - Shield Seat Design
  - Inverse Fluid Flow

#### Brochure 396

### Pressure Control Valves – Relief or Reducer

- Sizes Manifold Mount, or SAE Flange Connections
- Capacities to 1000 GPM (3800 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

#### Brochure 500

### Pump Unloading Systems

- Sizes Manifold mounted DIN 25 through 100
  - DIN 80 and 100 Modular Inline System
- Capacities to 2350 GPM (9000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Serviceability
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Removable Stainless Steel Orifice Assembly
- Fluid Flow Technology
  - Fluid Flow Control Ports
  - Shield Seat Design
  - Inverse Fluid Flow

#### Brochure 2213

### Proportional Pressure Control Valves – Relief, Reducer or Dual

- Sizes Manifold Mount, or SAE Flange Connections
- Capacities to 300 GPM (1140 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

#### Brochure 104
ISO-LOCK Valve

- Sizes Industry Standard Patterns NFPA/ANSI D03, D05, D08, C08, C09, RP10 & P06 Elwood Patterns
- Capacities to 350 GPM (1300 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Provides positive isolation of ports
- Fast & easy installation
- Allows for system diagnostics
- OSHA compliant Lockout/Tagout System
- Designed to operate with low viscosity fluids, raw water & Oil

Descaling System Components

Accumulator Control System

- Microprocessor based, computer compatible
- Designed for efficient control of air or gas ballasted accumulators, including:
  - Level, pressure and ballast control
  - Pump Sequencing
  - Level and pump status indicators
  - Pressure indicators
  - Computer port
  - Chart recorder output
  - Pump-enable switches
  - Shut-off control
  - Stop valve control

Brochures 105 & 380

Descaling Valves – DIN or Spindle Style

- Sizes 2" through 10"
- Capacities to 6000 GPM (23000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

Brochures 2218 and 2219

Accumulator Shut-Off Valve

- Sizes 2" through 10"
- Capacities to 8000 GPM (30000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Internals
  - Excellent corrosion resistance
  - High reliability and long-lasting performance
- Balanced Poppet Design
- Stainless Steel Spring-Assisted Design
  - Positive Sealing at low pressure filling operations
- Adjustable Pneumatic Flow
- One High-Pressure Static Seal
- Fluid Flow Technology
  - Shield Seat Design
  - Inverse Fluid Flow

Brochure 102
**Packed Spool Pilot Valve**

- Sizes Manifold Mount – DO5
- Capacities to 20 GPM (75 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Zero Leakage
- Stainless Steel Components
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Multiple Function Configurations
- Air/Electrical or Manually Operated

**Directional Control Valves**

- Sizes DIN 16 through DIN80 Manifold Mount, or SAE Flange Connections
  - Available in 2-, 3- or 4-Way, with multiple function configurations
- Capacities to 6000 GPM (23000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Reversible Soft Composite Disc
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow

**Valve Stands, Manifolds and Systems**

- Customized control valve packages including valve stand and forged steel manifold with SAE flange connections, wiring and common air line to all pilots
- Designed to meet customer circuit requirements
- Optional modular isolation valves for reduced maintenance time
- Integrate Elwood valves and customized electronic controls with non-Elwood components for single source convenience

**Check Valves**

- Sizes 2" through 10" Manifold Mount, ASTM or SAE Flange Connections
- Capacities to 8000 GPM (30000 LPM)
- Working pressures to 6000 PSI (414 Bar)
- Designed to operate with low viscosity fluids and raw water
- Removable Stainless Steel Cartridge Design
  - Excellent corrosion resistance
  - High reliability
  - Long-lasting performance
- Soft or Hard Seat Plungers
- Multiple Cracking Pressure Configurations
- Fluid Flow Technology
  - V-Notch Fluid Flow
  - Shield Seat Design
  - Inverse Fluid Flow
Packed Spool Directional Control Valves

- Directional Valve for a range of applications
- Up to 46 GPM (32 GPM nominal)
- 3000 PSI (207 bar) and 6000 PSI (414 bar)

- Air Solenoid Operated
- 3-position spring centered
- 2-position spring offset
- 2-position momentary contact

Brochure 82

Poppet Type Directional Control Valves

- Capacities to 1600 GPM (6057 LPM)
- 3000 PSI (207 bar), 4500 PSI (310 bar) and 6000 PSI (414 bar) models are available
- Built-in flow control
- Manifold mounted, NPT, socket weld or flanged

Brochure 395

Proportional Pressure Control System

Controlled Pressure Ranges:
- 390 PSI (27 bar) to 1500 PSI (103 bar)
- 480 PSI (33 bar) to 3000 PSI (207 bar)
- 580 PSI (40 bar) to 6000 PSI (414 bar)

FLOW RATE: To 1000 GPM (3785 LPM)

Brochure 104

Modular ISO-Lock

- Isolates manifold mounted directional control valves
- Reduces maintenance time - replace Directional Valves without depressurizing and draining hydraulic system.
- Single lever operation to close all four ports (P, T, A, B). Cylinders can remain under the external load without having to be blocked.
- Lockable per OSHA safety standard
- NFPA “DO”/CETOP and special mounting patterns available

Brochure 250

Descaling Valves & Pump Unloading Systems

Capacities:
- 3000 PSI (207 bar)
- 6000 PSI (414 bar)
- 6000 GPM (22710 LPM)

Connection Sizes: 1-1/4” to 10”

Brochures 104, 380 & 102

Accumulator Systems

- Descaling
- Mill Systems
- Presses
- Controls
- Level Pressure Pump Sequencing Ballast Charging
- Designed to your specifications

Brochures 105, 380 & 102